CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD SAN FRANCISCO BAY REGION

ORDER NO. 01-108

ADOPTION OF FINAL SITE CLEANUP REQUIREMENTS AND RESCISSION OF ORDER NO. 95-064 FOR:

VELCON FILTERS, INC. FRANK HAMEDI FORMER VELCON II PROPERTY - 1761 JUNCTION AVENUE SAN JOSE, SANTA CLARA COUNTY

VELCON FILTERS, INC.
LUCIAN W. TAYLOR & JEAN B. TAYLOR
TRIAD TOOL AND ENGINEERING, INC.
FORMER TAYLOR PROPERTY – 1750 ROGERS AVENUE, 1759 JUNCTION AVENUE
FORMER VELCON I PROPERTY – 1750 ROGERS AVENUE
SAN JOSE, SANTA CLARA COUNTY

The California Regional Water Quality Control Board, San Francisco Bay Region (hereinafter Board), finds that:

- 1. **Site Location**: Velcon Filters, Inc. (hereinafter, Velcon) is a company that manufactures fuel filters for aircraft. The Velcon Filters site consists of three adjacent properties located between Junction Avenue and Rogers Avenue in a light industrial area of northern San Jose (see figure 1). The entire site is approximately 4.5 acres in area. The area is a level plain. Coyote Creek is about 0.4 mile to the northeast.
- 2. **Site History**: Development of the site began in the 1960s and the site was used by Velcon for the manufacturing and testing of fuel filters for aircraft. The site consists of three properties as shown on the attached site map. These properties are the former Velcon II property at 1761 Junction Avenue, the former Taylor Property which spans both 1759 Junction Avenue and 1750 Rogers Avenue, and the former Velcon I Property at 1750 Rogers Avenue. The 1750 Rogers Avenue address is thus used for two separate parcels.

Jet fuel used for testing of the fuel filters was stored onsite in five 10,000 gallon and one 6,000 gallon underground tanks on the 1761 Junction Avenue property. A five hundred gallon wastewater sump was also used. A major fuel spill occurred at the site in 1975 or 1976. The spill involved 7,000 gallons of Jet-A fuel some of which found its way to Coyote Creek. The U.S. Coast Guard and Department of Fish and Game

responded to the spill. An estimated 1,500 gallons of fuel were recovered from Coyote Creek. A second major spill occurred in 1976. This spill resulted in the loss of 4,000 gallons of Jet-A fuel. No fuel was recovered. Other spills ranging from two to thirty gallons have occurred over the years. Velcon sold the properties that make up the site in 1993. The former Velcon I and Taylor properties were sold to Triad Tool and Engineering, Inc. The former Velcon II property was sold to Frank Hamedi.

3. Named Dischargers: Velcon Filters, Inc., is named as a discharger because Velcon owned and/or occupied the three properties at the time pollution occurred and through its actions is responsible for causing the soil and groundwater pollution at this site.

Lucian W. Taylor and Jean B. Taylor are named as secondarily responsible dischargers because they were the owners of the property at 1750 Rogers Avenue/1759 Junction Avenue (the Taylor property) at a time that discharges of pollutants to soil and groundwater are believed to have occurred.

Triad Tool and Engineering, Inc. is named as a secondarily responsible discharger because they are the current owners of 1750 Rogers Avenue/1759 Junction Avenue, the former Taylor Property and the former Velcon I property.

Frank Hamedi is named as a secondarily responsible discharger because he is the current owner of 1761 Junction Avenue, the former Velcon II property.

The secondarily responsible parties will be responsible for compliance only if the Board or Executive Officer finds that Velcon Filters, Inc., has failed to comply with the requirements of this order.

If additional information is submitted indicating that other parties caused or permitted any waste to be discharged on the site where it entered or could have entered waters of the state, the Board will consider adding those parties' names to this order.

- 4. **Regulatory Status**: This site is subject to NPDES General Permit (Order No. 99-051) adopted on July 21, 1999 and was subject to Site Cleanup Requirements (Order No. 95-064) adopted March 15, 1995.
- b. **Site Hydrogeology**: The Velcon site is located in the Santa Clara Valley, a structural basin filled with marine and alluvial sediments. The coarser deposits are probably the result of deposition in or near stream channels that drain the highlands that surround the basin. Finer grain deposits result from a variety of conditions with the eventual result of a heterogenous sequence of interbedded sands, silts, and clays. Municipal water supply wells tap an extensive deep regional confined aquifer that lies generally greater than 200 feet below ground surface (BGS). A thick, relatively impermeable aquitard

separates this deep confined aquifer from a complex series of discontinuous aquifers and aquitards that may extend up to within a few feet of the ground surface. Three shallow water bearing zones have been investigated as part of the remedial investigation at Velcon. The uppermost aquifer, designated the A aquifer, generally consists of clay with minor silt layers or lenses and lies generally between 10 and 30 feet BGS. Below this is the second aquifer, designated the B1 aquifer. The B1 aquifer consists of a discontinuous sand and silt layer of variable thickness. Below about 45 feet is the third aquifer, designated the B2 aquifer. The B2 aquifer is a sandy layer of unknown thickness. The upper two zones are not well separated and are hydraulically interconnected. The A zone and B1 zone are predominantly clay, and much of the groundwater in these zones appears to be associated with rootholes which are abundant.

6. **Remedial Investigation**: Petroleum hydrocarbons were detected in soil and groundwater when the underground jet fuel storage tanks were investigated for leakage in 1988. Jet fuel was discovered to be floating on the groundwater surface in the area of the underground tanks. Velcon began a site characterization program and installed seven groundwater monitoring wells, performed a soil vapor survey, and began extracting floating product from two of the wells. In 1990, halogenated volatile organic compounds (VOCs) were discovered to be present in groundwater also. Velcon expanded the focus of the remedial investigation to include VOCs and continued sampling of soil and groundwater, and added additional groundwater monitoring wells.

The extent of soil and groundwater contamination has been fully characterized. Jet fuel contaminated soil is found beneath much of the 1761 Junction Avenue property (Velcon II), which is where the underground jet fuel storage tanks and the fuel filter testing lab were located. This is the jet fuel source area. VOCs are present in soil beneath most of 1759 Junction Avenue, the unpaved portion of the Taylor Property. VOC contamination extends down to groundwater throughout this area. Soil with VOC concentrations in excess of 1 mg/kg extends over much of the 1759 Junction Avenue property, and a portion of the property has concentrations in excess of 10 mg/kg, with a maximum concentration of 52 mg/kg. The origin of this contamination is unknown. Also, a localized area of VOC contaminated soil is found beneath the 1750 Rogers Avenue property (Taylor Property portion) where Velcon's TCE vapor degreaser was located. Soil in the unsaturated zone polluted with VOCs contains almost exclusively TCE. In the saturated zone, the breakdown products of TCE, including TCA, DCE, DCA, and Vinyl Chloride are also found. The presence of jet fuel in the saturated zone provides the necessary conditions for enhanced breakdown of TCE.

The releases of contaminants at the site have impacted groundwater. A groundwater pollutant plume containing jet fuel and VOCs underlies much of the site and extends downgradient offsite. The VOC plume, which is most extensive, is approximately 800 x 650 feet. The portion of the plume containing jet fuel is about 550 x 200 feet in

extent. Jet fuel is present as floating product in the jet fuel source area. The amount of floating product has declined since remediation began, and currently jet fuel product is mainly found as a sheen on groundwater in monitoring wells near the former jet fuel underground storage tank location. VOC levels in groundwater are very high in the VOC source areas. During the first quarter of 2001, TCE was found at up to 5,000 ug/l; cis-1,2-DCE was found at up to 10,000 ug/l; and vinyl chloride was found at up to 280 ug/l in the A aquifer zone. Downgradient offsite, the highest concentrations of VOCs are found in the B1 aquifer zone. This is apparently due to "dropdown" of the VOCs through permeable areas connecting the two zones. During the first quarter of 2001, TCE was found at up to 660 ug/l; cis-1,2-DCE was found at up to 790 ug/l; and vinyl chloride was not detected above 25 ug/l in the B1 zone. Only trace levels of TCE and cis-1,2-DCE, below drinking water maximum contaminant levels, (MCLs) have been found in the B2 aquifer.

- 7. Adjacent Sites: The polluted groundwater plume extends offsite onto a number of downgradient properties. One of these properties, 1781 Junction Avenue, has had a release of gasoline to groundwater from an underground storage tank (UST). This site has undergone remediation and received case closure for the UST release. There are residual levels of BTEX compounds remaining from the gasoline release. Upgradient sources of VOCs are suggested by VOCs detected in monitoring wells MW-18A and MW-18B.
- 8. Interim Remedial Measures: In August 1988 after the discovery of jet fuel product floating on groundwater, Velcon began a floating product removal program from two monitoring wells in the jet fuel source area. Periodic pumping of jet fuel product continued through October 1991. In June 1993, Velcon removed two above-ground jet fuel/kerosene storage tanks, a resin tank, vapor degreaser, and associated above-ground piping at 1750 Rogers Avenue. In 1994, Velcon removed the six underground jet fuel storage tanks and sump at 1761 Junction Avenue. Approximately 680 cubic yards of pea gravel and 4 cubic yards of jet fuel saturated soil were removed from the tank pit excavation. Between March 1995 and June 1999, Velcon installed nine groundwater extraction wells in accordance with a two phase approach to hydraulic containment specified in Board Order No. 95-064. Phase 1 consisted of installing groundwater extraction wells onsite to provide remediation and hydraulic containment near the source areas and to prevent further migration of contaminants offsite onto downgradient properties. Phase 2 consisted of installing offsite extraction wells to provide remediation and hydraulic containment for the downgradient portion of the plume, and adding additional onsite extraction wells. Two more extraction wells were installed in April 2001 to provide additional remediation and capture in the area of the northern corner of the 1750 Rogers property. Currently there are 11 groundwater extraction wells, two product removal wells, and 53 monitoring wells that have been installed to remediate and monitor the pollutant plume. Groundwater is extracted, treated by

filtration, ultraviolet peroxidation, activated carbon, and then discharged to a storm drain under the NPDES General Permit.

9. Feasibility Study: Velcon submitted a report, "Proposed Final Cleanup Objectives and Actions", dated April 16, 1999, pursuant to Order No. 95-064. This report contains the feasibility study for the site, as well as a summary of the remedial actions, soil and groundwater pollution levels, and an evaluation of the effectiveness of the interim remedial measures. As part of the feasibility study, Velcon screened six remedial technologies for soil and seven for groundwater. Technologies were screened for effectiveness, implementability, and cost. Evaluation factors used during the screening process included: protection of human health and the environment; protection of groundwater beneficial uses; and plume containment. The technologies screened for soil remediation included excavation, soil vapor extraction, in situ chemical oxidation, in situ thermal treatment using steam injection, in-situ electrical resistive soil heating, and enhanced in situ biodegradation. The groundwater remedial technologies screened included pump and treat, in situ chemical oxidation, in-situ thermal treatment using steam injection, resistive heating, enhanced biodegradation, surfactant/co-solvent injection, and permeable reaction wall containment. The recommended final remedial action in the April 1999 report was continued source reduction by shallow excavation of the jet fuel source area at 1761 Junction Avenue, and groundwater extraction and treatment onsite and offsite.

At the request of Board staff, Velcon submitted a June 30, 2000 report proposing soil cleanup objectives for VOCs for specific VOC source areas of the site that would be protective of groundwater, i.e. soil cleanup levels that would result in no additional leaching of VOCs from soil to underlying groundwater.

10. Cleanup Plan: Velcon's "Proposed Final Cleanup Objectives and Actions" calls for remediation of soil at the source areas to levels that meet the human health risk criteria for an industrial land-use scenario. The plan proposes soil cleanup levels to meet an excess cancer target risk level of 10⁻⁵ and a cumulative hazard index of one. Institutional constraints are proposed to provide protection for site occupants. Cleanup levels for VOCs in soil based on the potential for chemicals of concern to migrate from soil to groundwater were not included in the plan, but were submitted as an addendum (June 30, 2000 report). The cleanup plan proposes narrative groundwater cleanup objectives of: containing the groundwater pollutant plume through groundwater extraction so that there is no additional migration of pollutants; continued removal of the mass of pollutants from the affected groundwater via treatment of extracted groundwater followed by discharge of treated groundwater to a storm drain; and monitoring of groundwater quality.

This Order accepts Velcon's cleanup plan, but modifies it to include numerical cleanup standards for groundwater (drinking water maximim contaminant levels), and incorporates numerical soil cleanup levels contained in the June 30, 2000 addendum. Due to the volume of contaminated soil and financial constraints of the discharger, a phased approach to soil remediation is required pursuant to Task C.2 of this Order.

11. **Risk Assessment:** Velcon performed a risk assessment for the site, which is detailed in its May 19, 1998 report, "Human Health Risk-Based Cleanup Objectives for Soil and Groundwater". The report developed risk-based cleanup objectives for soil and groundwater. Current and potential future exposure pathways were evaluated. The primary exposure pathways were inhalation of vapor in indoor air and exposure to construction workers working in contaminated areas. The risk assessment did not include the use of site groundwater as a source of drinking water. Shallow groundwater is not currently used for drinking water supply nor is it expected that it will be used in the future at this site. The groundwater cleanup standards specified by this Order are Drinking Water MCLs because shallow groundwater at the site is considered a potential source of drinking water under the guidelines promulgated by the State Board. Velcon developed cleanup standards for soil and groundwater using a carcinogenic risk level of both 10⁻⁵ and 10⁻⁶ for potentially carcinogenic compounds and hazard index of below 1.0 for noncarcinogenic health risks. The groundwater cleanup levels selected, drinking water MCLs, meet the 10⁻⁶ risk level. The soil cleanup standards selected for VOCs are based on protection of groundwater which was the most stringent limiting factor. It meets the 10⁻⁵ risk level for the potential human health exposure pathways for soil contamination at the site. The soil cleanup standards for jet fuel are different than the standards developed in the 1998 report and are based on Velcon's updated risk assessment for the 1761 Junction Avenue property which is detailed in the July 27, 2001 report, "Updated Feasibility Study, 1761 Junction Avenue", and on limits the Board uses for protection of human health and prevention of nuisance conditions. The jet fuel soil cleanup standards have a hazard index of less than 1.0. Carcinogenic compounds are not associated with jet fuel at the site.

For comparison, the Board considers the following risks to be acceptable at remediation sites: a hazard index of 1.0 or less for non-carcinogens, and an excess cancer risk of 10^{-4} to 10^{-6} or less for carcinogens.

Due to excessive risk that will be present at the site pending full remediation, institutional constraints are appropriate to limit on-site exposure to acceptable levels. Institutional constraints include a deed restriction that notifies future owners of subsurface contamination and prohibits the use of shallow groundwater beneath the site as a source of drinking water until cleanup standards are met. The deed restriction also prohibits use of the site for residential development.

12. Basis for Cleanup Standards

a. General: State Board Resolution No. 68-16, "Statement of Policy with Respect to Maintaining High Quality of Waters in California," applies to this discharge and requires attainment of background levels of water quality, or the highest level of water quality which is reasonable if background levels of water quality cannot be restored. Cleanup levels other than background must be consistent with the maximum benefit to the people of the State, not unreasonably affect present and anticipated beneficial uses of such water, and not result in exceedance of applicable water quality objectives. The previously-cited cleanup plan confirms the Board's initial conclusion that background levels of water quality cannot be restored. The Board has experience with numerous sites where groundwater has been polluted by solvents. Experience has shown that in most cases current technology can reduce the concentrations of contaminants in groundwater but cannot restore groundwater to background quality. This order and its requirements are consistent with Resolution No. 68-16.

State Board Resolution No. 92-49, "Policies and Procedures for Investigation and Cleanup and Abatement of Discharges Under Water Code Section 13304," applies to this discharge. This order and its requirements are consistent with the provisions of Resolution No. 92-49, as amended.

b. Beneficial Uses: The Board adopted a revised Water Quality Control Plan for the San Francisco Bay Basin (Basin Plan) on June 21, 1995. This updated and consolidated plan represents the Board's master water quality control planning document. The revised Basin Plan was approved by the State Water Resources Control Board and the Office of Administrative Law on July 20, 1995, and November 13, 1995, respectively. A summary of regulatory provisions is contained in Title 23, California Code of Regulations, Section 3912. The Basin Plan defines beneficial uses and water quality objectives for waters of the State, including surface waters and groundwaters.

Board Resolution No. 89-39, "Sources of Drinking Water," defines potential sources of drinking water to include all groundwater in the region, with limited exceptions for areas of high TDS, low yield, or naturally-high contaminant levels. Groundwater underlying and adjacent to the site qualifies as a potential source of drinking water.

The Basin Plan designates the following potential beneficial uses of groundwater underlying and adjacent to the site:

- o Municipal and domestic water supply
- o Industrial process water supply
- o Industrial service water supply
- o Agricultural water supply
- o Freshwater replenishment to surface waters

At present, there is no known use of shallow groundwater underlying the site for the above purposes. Deep groundwater from below the regional aquitard is used for municipal supply as discussed in Finding 5.

The existing and potential beneficial uses of Coyote Creek include:

- o Water contact and non-contact recreation
- o Wildlife habitat
- o Cold freshwater and warm freshwater habitat
- o Fish migration and spawning
- o Preservation of rare and endangered species
- c. Basis for Groundwater Cleanup Standards: The groundwater cleanup standards for the site are based on applicable water quality objectives and are the more stringent of EPA and California primary maximum contaminant levels (MCLs). Cleanup to this level will result in acceptable residual risk to humans.
- d. **Basis for Soil Cleanup Standards**: The soil cleanup standards for VOCs at the site are based on modeling studies performed by the discharger (June 30, 2000 cleanup plan addendum). These standards assure no additional significant leaching of VOCs from soil sources to groundwater. The soil cleanup standards for TPH are based on the prevention of nuisance conditions and on the protection of health for onsite workers. The shallow soil TPH cleanup level of 1,000 mg/kg is based on the Massachusetts Department of Environmental Protection (DEP) ceiling level for an industrial land-use scenario. The deeper soil TPH cleanup level of 3,000 mg/kg is based on the saturation limit cited in the discharger's July 27, 2001 updated feasibility study for the 1761 Junction Avenue property, and on the last several years of monitoring data for the site, which indicate that the TPH groundwater plume is shrinking and soil is no longer contributing significantly to the plume.
- 13. **Future Changes to Cleanup Standards**: The goal of this remedial action is to restore the beneficial uses of groundwater underlying and adjacent to the site. Results from other sites suggest that full restoration of beneficial uses to groundwater as a result of active remediation at this site may not be possible. If full restoration of beneficial uses

is not technologically nor economically achievable within a reasonable period of time, then the discharger may request modification to the cleanup standards or establishment of a containment zone, a limited groundwater pollution zone where water quality objectives are exceeded. Conversely, if new technical information indicates that cleanup standards can be surpassed, the Board may decide that further cleanup actions should be taken.

- 14. **Reuse or Disposal of Extracted Groundwater**: Board Resolution No. 88-160 allows discharges of extracted, treated groundwater from site cleanups to surface waters only if it has been demonstrated that neither reclamation nor discharge to the sanitary sewer is technically and economically feasible.
- 15. **Basis for 13304 Order**: The discharger has caused or permitted waste to be discharged or deposited where it is or probably will be discharged into waters of the State and creates or threatens to create a condition of pollution or nuisance.
- 16. Cost Recovery: Pursuant to California Water Code Section 13304, the discharger is hereby notified that the Board is entitled to, and may seek reimbursement for, all reasonable costs actually incurred by the Board to investigate unauthorized discharges of waste and to oversee cleanup of such waste, abatement of the effects thereof, or other remedial action, required by this order.
- 17. CEQA: This action is an order to enforce the laws and regulations administered by the Board. As such, this action is categorically exempt from the provisions of the California Environmental Quality Act (CEQA) pursuant to Section 15321 of the Resources Agency Guidelines.
- 18. **Notification**: The Board has notified the discharger and all interested agencies and persons of its intent under California Water Code Section 13304 to prescribe site cleanup requirements for the discharge, and has provided them with an opportunity to submit their written comments.
- 19. **Public Hearing**: The Board, at a public meeting, heard and considered all comments pertaining to this discharge.

IT IS HEREBY ORDERED, pursuant to Section 13304 of the California Water Code, that the dischargers (or their agents, successors, or assigns) shall cleanup and abate the effects described in the above findings as follows:

A. PROHIBITIONS

- 1. The discharge of wastes or hazardous substances in a manner which will degrade water quality or adversely affect beneficial uses of waters of the State is prohibited.
- 2. Further significant migration of wastes or hazardous substances through subsurface transport to waters of the State is prohibited.
- 3. Activities associated with the subsurface investigation and cleanup which will cause significant adverse migration of wastes or hazardous substances are prohibited.

B. CLEANUP PLAN AND CLEANUP STANDARDS

- 1. **Implement Cleanup Plan**: The dischargers shall implement the cleanup plan described in finding 10 and as modified by this Order.
- 2. **Groundwater Cleanup Standards**: The following groundwater cleanup standards shall be met in all wells identified in the Self-Monitoring Program:

Constituent	Standard (ug/l)	Basis
Tetrachloroethene (PCE)	5	MCL
Trichloroethene (TCE)	5	MCL
Cis-1,2-dichloroethene (cis-1,2-DCE)	6	MCL
Trans-1,2-dichloroethene (trans-1,2-DCE)	10	MCL
Vinyl Chloride	0.5	MCL
1,1-Dichloroethane (1,1-DCA)	5	MCL
1,2-Dichloroethane (1,2-DCA)	0.5	MCL
1,1,1-Trichloroethane (1,1,1-TCA)	200	MCL

1,1,2-Trichloroethane (1,1,2-TCA)	5	MCL
Total Extactable Petroleum Hydrocarbons as Jet Fuel (TPHj)	Removal of floating product	
Benzene	1	MCL
Toluene	150	MCL
Ethylbenzene	700	MCL
Xylene	1,750	MCL

- 3. Soil Cleanup Standards: Soil cleanup standards shall be as follows:
 1750 Rogers Avenue 14.4 mg/kg of TCE, with current engineering controls *
 1759 Junction Avenue 1.5 mg/kg of TCE. **
 1761 Junction Avenue 1000 mg/kg of TPH as jet fuel for soil three feet or less below ground surface and 3000 mg/kg of TPH as jet fuel for soil greater than three feet below ground surface. ***
 - * If the existing building overlying the VOC soil source at 1750 Rogers Avenue is removed, soil shall be remediated to the 1.5 mg/kg standard or an alternative cleanup standard as in ** below.
 - ** The dischargers may propose an alternative cleanup standard, subject to Regional Board approval. Such a proposal must demonstrate that (1) it is infeasible to meet the 1.5 mg/kg standard based on phase 1 soil remediation results and other relevant factors, and (2) appropriate engineering controls can be shown to prevent soil containing VOCs at the proposed alternative cleanup level from acting as a source of contaminants leaching to groundwater.
 - *** Due to the inaccessibilty of TPH contaminated soil under current site conditions, remediation of TPH contaminated soil may be delayed until such soil is accessible. Soil shall be considered accessible when the current tenant vacates the property or when enough currently existing equipment and materials are removed to make remediation practical. In the meantime, a risk management plan approved by the Executive Officer must be developed. The plan shall provide for the prevention of nuisance conditions associated with TPH contaminated soil, as well as ensure that activities on-site do not result in

unacceptable risk or exposure to workers from TPH contaminated soil. The plan shall be submitted by November 1, 2001.

C. TASKS

1. ADDITIONAL SOIL REMEDIATION

a. PHASE 1 WORKPLAN COMPLIANCE DATE:

November 1, 2001

Submit a technical report acceptable to the Executive Officer proposing a plan, including a time schedule, to remediate the area of highest TCE concentration on the 1759 Junction Avenue property, which is in the vicinity of soil boring T-4. The report shall address remediation of the "hot spot" where TCE levels are higher than the general level of TCE soil pollution on the property. At a minimum, vadose zone soil in the area of soil boring location T-4 containing TCE in excess of 15 mg/kg shall be remediated.

b. PHASE 1 IMPLEMENTATION REPORT

COMPLIANCE DATE:

According to schedule in the Phase 1 Workplan approved by the Executive

Officer.

Submit technical reports documenting completion of Phase 1 soil remediation activities.

c. PHASE 2 WORKPLAN

COMPLIANCE DATE:

July 30, 2005

Submit a technical report acceptable to the Executive Officer proposing a plan, including a time schedule, to remediate VOC impacted vadose zone soil to the TCE cleanup standard over the whole source area at 1759 Junction Avenue.

d. PHASE 2 IMPLEMENTATION REPORT

COMPLIANCE DATE:

According to schedule in the Phase 2 Workplan approved by the Executive

Officer.

Submit a technical report documenting completion of Phase 2 soil remediation activities.

2. PROPOSED INSTITUTIONAL CONSTRAINTS

COMPLIANCE DATE:

November 1, 2001

Submit a technical report acceptable to the Executive Officer documenting procedures to be used by the dischargers to prevent or minimize human exposure to soil and groundwater contamination prior to meeting cleanup standards. Such procedures shall include a deed restriction prohibiting the use of shallow groundwater as a source of drinking water. The deed restriction shall also specify any engineering controls implemented to meet cleanup standards contained in Section B.3 for the protection of groundwater. The deed restriction shall also include a ban on use of the site for residential development.

3. IMPLEMENTATION OF INSTITUTIONAL CONSTRAINTS

COMPLIANCE DATE:

60 days after Executive Officer approval

Submit a technical report acceptable to the Executive Officer documenting that the proposed institutional constraints have been implemented in cooperation with current property owners (Frank Hamedi and Triad Tool).

4. FIVE-YEAR STATUS REPORT

COMPLIANCE DATE:

December 30, 2006

Submit a technical report acceptable to the Executive Officer evaluating the effectiveness of the approved cleanup plan. The report should include:

- a. Summary of effectiveness in controlling contaminant migration and protecting human health and the environment
- b. Comparison of contaminant concentration trends with cleanup standards
- c. Comparison of anticipated versus actual costs of cleanup activities
- d. Performance data (e.g. groundwater volume extracted, chemical mass removed, mass removed per million gallons extracted)
- e. Cost effectiveness data (e.g. cost per pound of contaminant removed)
- f. Summary of additional investigations (including results) and significant modifications to remediation systems
- g. Additional remedial actions proposed to meet cleanup standards (if applicable) including time schedule

If cleanup standards have not been met and are not projected to be met within a reasonable time, the report should assess the technical practicability of meeting cleanup standards and may propose an alternative cleanup strategy.

5. **PROPOSED CURTAILMENT**

COMPLIANCE DATE:

60 days prior to proposed curtailment

Submit a technical report acceptable to the Executive Officer containing a proposal to curtail remediation. Curtailment includes system closure (e.g. well abandonment), system suspension (e.g. cease extraction but wells retained), and significant system modification (e.g. major reduction in extraction rates, closure of individual extraction wells within extraction network). The report should include the rationale for curtailment. Proposals for final closure should demonstrate that cleanup standards have been met, contaminant concentrations are stable, and contaminant migration potential is minimal.

6. IMPLEMENTATION OF CURTAILMENT

COMPLIANCE DATE:

60 days after Executive Officer approval

Submit a technical report acceptable to the Executive Officer documenting completion of the tasks identified in Task 5.

7. EVALUATION OF NEW HEALTH CRITERIA

COMPLIANCE DATE:

90 days after requested

by Executive Officer

Submit a technical report acceptable to the Executive Officer evaluating the effect on the approved cleanup plan of revising one or more cleanup standards in response to revision of drinking water standards, maximum contaminant levels, or other health-based criteria.

8. EVALUATION OF NEW TECHNICAL INFORMATION

COMPLIANCE DATE:

90 days after requested

by Executive Officer

Submit a technical report acceptable to the Executive Officer evaluating new technical information which bears on the approved cleanup plan and cleanup

standards for this site. In the case of a new cleanup technology, the report should evaluate the technology using the same criteria used in the feasibility study. Such technical reports shall not be requested unless the Executive Officer determines that the new information is reasonably likely to warrant a revision in the approved cleanup plan or cleanup standards.

9. **Delayed Compliance**: If the dischargers are delayed, interrupted, or prevented from meeting one or more of the completion dates specified for the above tasks, the dischargers shall promptly notify the Executive Officer and the Board may consider revision to this Order.

D. PROVISIONS

- 1. **No Nuisance**: The storage, handling, treatment, or disposal of polluted soil or groundwater shall not create a nuisance as defined in California Water Code Section 13050(m).
- 2. Good O&M: The dischargers shall maintain in good working order and operate as efficiently as possible any facility or control system installed to achieve compliance with the requirements of this Order.
- 3. Cost Recovery: The dischargers shall be liable, pursuant to California Water Code Section 13304, to the Board for all reasonable costs actually incurred by the Board to investigate unauthorized discharges of waste and to oversee cleanup of such waste, abatement of the effects thereof, or other remedial action, required by this Order. If the site addressed by this Order is enrolled in a State Board-managed reimbursement program, reimbursement shall be made pursuant to this Order and according to the procedures established in that program. Any disputes raised by the dischargers over reimbursement amounts or methods used in that program shall be consistent with the dispute resolution procedures for that program.
- 4. **Access to Site and Records**: In accordance with California Water Code Section 13267(c), the dischargers shall permit the Board or its authorized representative:
 - a. Entry upon premises in which any pollution source exists, or may potentially exist, or in which any required records are kept, which are relevant to this Order.
 - b. Access to copy any records required to be kept under the requirements of this Order.

- c. Inspection of any monitoring or remediation facilities installed in response to this Order.
- d. Sampling of any groundwater or soil which is accessible, or may become accessible, as part of any investigation or remedial action program undertaken by the dischargers.
- 5. **Self-Monitoring Program**: The dischargers shall comply with the Self-Monitoring Program as attached to this Order and as may be amended by the Executive Officer.
- 6. Contractor / Consultant Qualifications: All technical documents shall be signed by and stamped with the seal of a California registered geologist, a California certified engineering geologist, or a California registered civil engineer.
- 7. **Lab Qualifications**: All samples shall be analyzed by State-certified laboratories or laboratories accepted by the Board using approved EPA methods for the type of analysis to be performed. All laboratories shall maintain quality assurance/quality control (QA/QC) records for Board review. This provision does not apply to analyses that can only reasonably be performed on-site (e.g. temperature).
- 8. **Document Distribution**: Copies of all correspondence, technical reports, and other documents pertaining to compliance with this Order shall be provided to the following agencies:
 - a. Santa Clara Valley Water District

The Executive Officer may modify this distribution list as needed.

- 9. **Reporting of Changed Owner or Operator**: The dischargers shall file a technical report on any changes in site occupancy or ownership associated with the property described in this Order.
- 10. Reporting of Hazardous Substance Release: If any hazardous substance is discharged in or on any waters of the State, or discharged or deposited where it is, or probably will be, discharged in or on any waters of the State, the dischargers shall report such discharge to the Regional Board by calling (510) 622-2300 during regular office hours (Monday through Friday, 8:00 to 5:00). A written report shall be filed with the Board within five working days. The report shall describe: the nature of the hazardous substance, estimated quantity

involved, duration of incident, cause of release, estimated size of affected area, nature of effect, corrective actions taken or planned, schedule of corrective actions planned, and persons/agencies notified.

This reporting is in addition to reporting to the Office of Emergency Services required pursuant to the Health and Safety Code.

- 11. **Secondarily-Responsible Dischargers**: Within 60 days after being notified by the Executive Officer that other named dischargers have failed to comply with this order; Frank Hamedi, as property owner, shall then be responsible for complying with this order for the 1761 Junction Avenue Property; Lucian W. Taylor & Jean B. Taylor, as property owners at the time contamination occurred, and Triad Tool and Engineering, Inc., as the current property owner, shall then be responsible for complying with this order for the 1750 Rogers Avenue and 1759 Junction Avenue Property. Task deadlines above will be automatically adjusted to add 60 days.
- 12. **Rescission of Existing Order**: This Order supercedes and rescinds Order No. 95-064.
- 13. **Periodic SCR Review**: The Board will review this Order periodically and may revise it when necessary.

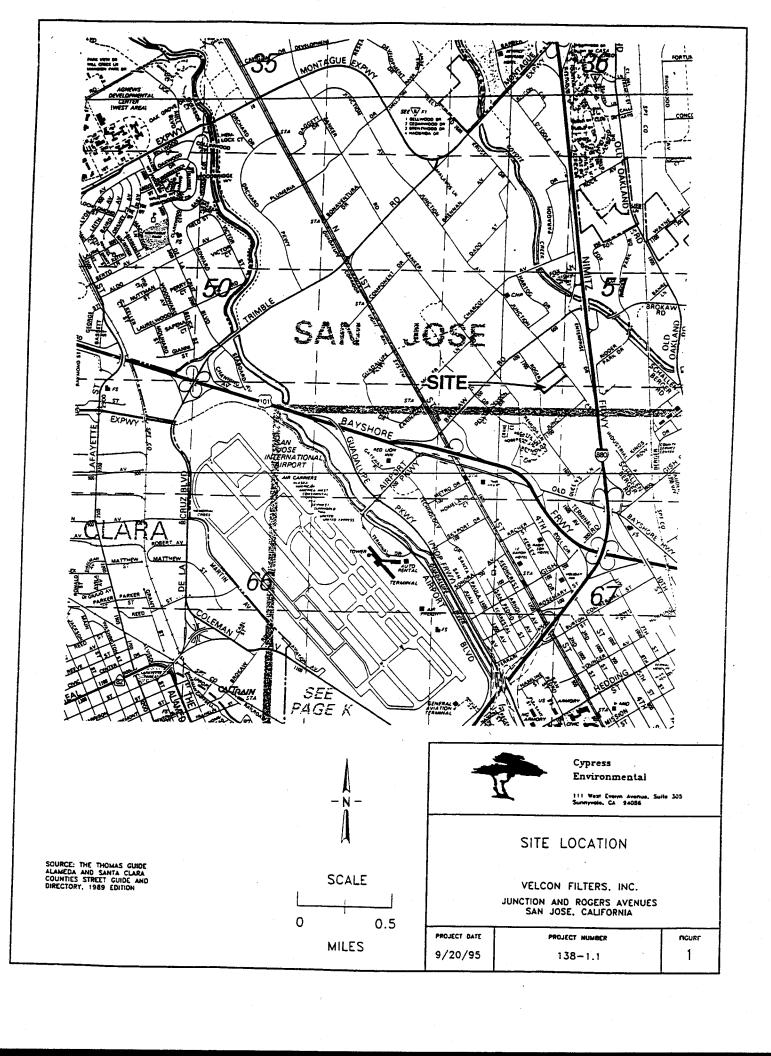
I, Loretta K. Barsamian, Executive Officer, do hereby certify that the foregoing is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, San Francisco Bay Region, on September 19, 2001.

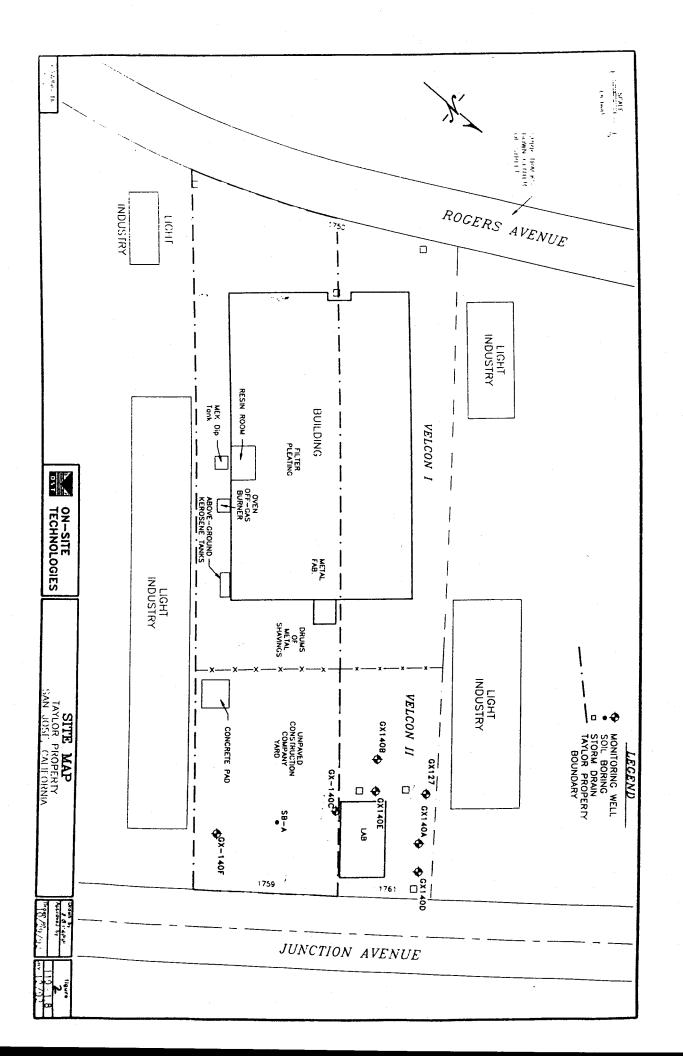
Loretta K. Barsamian
Executive Officer

FAILURE TO COMPLY WITH THE REQUIREMENTS OF THIS ORDER MAY SUBJECT YOU TO ENFORCEMENT ACTION, INCLUDING BUT NOT LIMITED TO: IMPOSITION OF ADMINISTRATIVE CIVIL LIABILITY UNDER WATER CODE SECTIONS 13268 OR 13350, OR REFERRAL TO THE ATTORNEY GENERAL FOR INJUNCTIVE RELIEF OR CIVIL OR CRIMINAL LIABILITY

Attachments: Self-Monitoring Program

Site Maps (Figure 1 and Figure 2)





CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD SAN FRANCISCO BAY REGION

SELF-MONITORING PROGRAM FOR:

VELCON FILTERS, INC. FRANK HAMEDI FORMER VELCON II PROPERTY - 1761 JUNCTION AVENUE SAN JOSE, SANTA CLARA COUNTY

VELCON FILTERS, INC.
LUCIAN W. TAYLOR & JEAN B. TAYLOR
TRIAD TOOL AND ENGINEERING, INC.
FORMER TAYLOR PROPERTY - 1750 ROGERS AVENUE, 1759 JUNCTION AVENUE
FORMER VELCON I PROPERTY - 1750 ROGERS AVENUE
SAN JOSE, SANTA CLARA COUNTY

1. **Authority and Purpose**: The Board requests the technical reports required in this Self-Monitoring Program pursuant to Water Code Sections 13267 and 13304. This Self-Monitoring Program is intended to document compliance with Board Order No. 01-108 (site cleanup requirements).

2. **Monitoring**: The dischargers shall measure groundwater elevations quarterly in all monitoring wells, and shall collect and analyze representative samples of groundwater according to the following table:

	e following table.	
Well No.	ТРНј	VOCs
A-Zone Wells		
GX-140B	Q	Q
GX-140C		Q
GX-140D	Q	Q
GX-140F	Q	Q
MW-2A	Q	Q
MW-3A		Q
MW-7A	Q	Q
MW-8A	Q	Q
MW-10A	Q	Q
MW-11A		Q
MW-12A	Q	Q
MW-14A		Q
MW-15A		Q
MW-18A	Q	Q

Well No.	ТРНј	VOCs
MW-19A		Q
MW-20A		
MW-3	Q	Õ
MW-4		Õ
MW-7		Q Q Q Q
B1-Level Wel	ls	
MW2-B1		Q
MW-3B1		Q
MW-4B1		Õ
MW-5B1	Q	Õ
MW-6B1		Õ
MW-8B1		Õ
MW-9B1	Q	Õ
MW-10B1		Õ
MW-11B1		Õ
MW-13B1		Ô
MW-15B1		Õ
MW-16B1		Õ
MW-18B1		000000000000000000000000000000000000000
EW-7		Q I
B2-Level Well		*
MW-11B2	-	O
		<u> </u>

Key: Q = Quarterly

The analytical methods used shall be:

TPHj - Method 8015 modified

BTEX - Method 8020

Halogenated VOCs - Method 8010

The dischargers shall sample any new monitoring or extraction wells and analyze groundwater samples for the same constituents as shown in the above table, in accordance with a schedule approved by the Executive Officer. The dischargers may propose changes in the above table; any proposed changes are subject to Executive Officer approval.

3. Quarterly Monitoring Reports: The dischargers shall submit quarterly monitoring reports to the Board no later than 30 days following the end of the quarter (e.g. report for first quarter of the year due April 30). The first quarterly monitoring report shall be due on October 30, 2001. The reports shall include:

- a. Transmittal Letter: The transmittal letter for the quarterly NPDES reports shall discuss any violations during the reporting period and actions taken or planned to correct the problem. The letter shall be signed by the discharger's principal executive officer or his/her duly authorized representative, and shall include a statement by the official, under penalty of perjury, that the report is true and correct to the best of the official's knowledge.
- b. Groundwater Elevations: Groundwater elevation data shall be presented in tabular form, and a groundwater elevation map should be prepared for each monitored water-bearing zone. Historical groundwater elevations shall be included in the fourth quarterly report each year.
- c. Groundwater Analyses: Groundwater sampling data shall be presented in tabular form, and an isoconcentration map should be prepared for one or more key contaminants for each monitored water-bearing zone, as appropriate. The report shall indicate the analytical method used, detection limits obtained for each reported constituent, and a summary of QA/QC data. Historical groundwater sampling results shall be included in the fourth quarterly report each year. The report shall describe any significant increases in contaminant concentrations since the last report, and any measures proposed to address the increases. Supporting data, such as lab data sheets, need not be included (however, see record keeping below).
- d. Groundwater Extraction: If applicable, the quarterly NPDES report shall include groundwater extraction results in tabular form, for each extraction well and for the site as a whole, expressed in gallons per minute and total groundwater volume for the quarter. The report shall also include contaminant removal results, from groundwater extraction wells and from other remediation systems (e.g. soil vapor extraction), expressed in units of chemical mass per day and mass for the quarter. Historical mass removal results shall be included in the fourth quarterly report each year.
- e. Status Report: The quarterly report shall describe relevant work completed during the reporting period (e.g. site investigation, interim remedial measures) and work planned for the following quarter.
- 5. **Violation Reports**: If the dischargers violate requirements in the Site Cleanup Requirements, then the dischargers shall notify the Board office by telephone as soon as practicable once the dischargers has knowledge of the violation. Board staff may, depending on violation severity, require the dischargers to submit a separate technical report on the violation within five working days of telephone notification.

- 6. Other Reports: The dischargers shall notify the Board in writing prior to any site activities, such as construction or underground tank removal, which have the potential to cause further migration of contaminants or which would provide new opportunities for site investigation.
- 7. **Record Keeping**: The dischargers or his/her agent shall retain data generated for the above reports, including lab results and QA/QC data, for a minimum of six years after origination and shall make them available to the Board upon request.
- 8. **SMP Revisions**: Revisions to the Self-Monitoring Program may be ordered by the Executive Officer, either on his/her own initiative or at the request of the dischargers. Prior to making SMP revisions, the Executive Officer will consider the burden, including costs, of associated self-monitoring reports relative to the benefits to be obtained from these reports.

I, Loretta K. Barsamian, Executive Officer, hereby certify that this Self-Monitoring Program was adopted by the Board on September 19, 2001.

Attachment: Well Location Map

Loretta K. Barsamian

Executive Officer

